

PASCO POND 12-1



Pasco Pond, 8 August 2003

In the last few years, the Walla Walla District, U.S. Army Corps of Engineers has been plagued with summertime complaints from some of our neighbors in Pasco, Washington about the smell and the algae mat in one of the pump plant ponds. This pond is approximately 8 acres in size and 1-4 feet deep. It is fed with surface runoff from the local area as well as seepage from the levee interior drain system.

In the summer of 2003, everything came to a head when the algae problem in the pond was compounded by the long, hot days. A solution had to be found to eliminate the smell plus the 3- to 4-inch algae mat; the first method was adding oxygen to the water was the key, but we just didn't know how to do it. To agitate the water by pumping, but the pond proved to be too big for the type of pumps available, and the algae couldn't be kept out of the pump intake. The next method was to install a small bubbler system; but again, there was very little effect, if any, except for the constant drone of the diesel engine of the air compressor. Next, both methods were tried at the same time with poor results. The next plan was to try log booms and hand labor to collect and remove the algae, but at that point we stumbled onto a new company in Spokane, Washington with a new green technology, a Coherent Water Resonator.

A solar-powered water resonator was installed in the pond on 18 August 2003. At the time of the installation, the dissolved oxygen level (DO) in the pond was between 2 and 3 ppm. Four days later the DO had gone to 8-10 ppm on the meter (the DO peaked at just over 17 ppm during the seven weeks the resonator was in the pond). Eureka! To monitor the process, the pond was sampled every day for two weeks to identify any/and all changes to the water in DO, PH, BOD, nitrate, total P, P04/P, and temperature. With the exception of the DO, BOD, all other parameters stayed about the same.

After two weeks there was a noticeable change in the color of the algae. No longer did it have the bright green slime color, but it was turning a dull sage green on the edges. At five weeks 40 years of decomposed matter from the bottom of the pond was surfacing and disappearing. We removed the equipment on 14 October 2003. After seven weeks, the pond water was clear, the algae was gone, and so was the odor. I can't tell you how it works because the equipment is patented, but I can show you pictures, and share our water test results if you are interested. I am a believer.



If you have experienced problems similar to ours, maybe this resource will help. Clean Water Research and Technologies can be reached at 1-866-489-1704.

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